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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Antonio Abbondanzio

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IBM CORPORATION

PO BOX 12195

DEPT YXSA, BLDG 002

RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

TANG, KENNETH

ART UNIT

PAPER NUMBER

2195

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/981,519	Applicant(s) ABBONDANZIO ET AL.	
	Examiner Kenneth Tang	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This final action is in response to the Appeal Brief filed on 3/23/06. Prosecution has been reopened and the Applicant's arguments are moot in view of the new grounds of rejections.
2. Claims 1-22 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Ruberg (US 6,895,588 B1).**

4. As to claim 1, Ruberg teaches a method for automatically switching remote shared devices in a dense server environment (*see Figs. 2 and 3, see Abstract*) comprising the steps of:

receiving a request to access a shared device from a server blade (*done by device manager and remote device driver*) (*col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-33, etc.*); and

issuing a query as to whether said shared device is being accessed (*done by device manager and remote device driver*) (*col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, etc.*);

wherein if said shared device is not being accessed (unavailable, etc.) by said server blade then the method further comprises the steps of:

receiving a response to said query indicating that said shared device is not available (*device manager and remote device driver works to give availability of devices*) (*see Abstract, col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, etc.*); and

waiting to receive a response that said shared device is available (*device manager and remote device driver works to give availability of devices*) (*see Abstract, col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, etc.*).

5. In summary, Ruberg teaches accessing a remote device (*USB device, coupled flash memory, etc.*) over a network and can be applied in a virtual desktop system (*see Abstract, col. 2, lines 40-51, etc.*). The computational service providers (*Fig. 3, item 300*) are a group of computers (*server blades*) that are connected to human interface devices (*remote shared devices*) (*Fig. 3, item 302*). The device manager and *remote device driver* handle the communication between the server blade and the shared devices (*col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, etc.*).

6. As to claim 2, Ruberg teaches determining if said shared device is being accessed (*device status message is sent when a device is connected*) (*col. 10, lines 55-56, etc.*).

7. As to claim 3, Ruberg teaches wherein if said shared device is not being accessed then the method further comprises the steps of: connecting said shared device with said server blade; and transferring said request to access said shared device to said shared device (*done by device manager and remote device driver*) (col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-33, etc.).

8. As to claim 4, Ruberg teaches wherein if said shared device is being accessed then the method further comprises the step of: determining if said shared device is being accessed by said server blade (*done by device manager and remote device driver*) (col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-33, etc.).

9. As to claim 5, Ruberg teaches wherein if said shared device is being accessed by said server blade then the method further comprises the steps of: connecting said shared device with said server blade (*done by device manager and remote device driver*) (col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-33, etc.).

10. As to claim 6, Ruberg teaches: receiving said response that said shared device is available; connecting said shared device with said server blade; and transferring said request to

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access said shared device to said shared device (*done by device manager and remote device driver*) (col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-33, etc.).

11. As to claim 7, Ruberg teaches that the shared device can be a Universal Serial Bus device (col. 4, lines 47-52 and line 67, etc.).

12. As to claims 8-14, they are rejected for the same reasons as stated in the rejections of claims 1-7.

13. As to claim 15, Ruberg teaches a system, comprising:

one or more shared devices (*Fig. 3, items 302, 321, 322, 323 or Fig. 2, items 210a-d*);
and

a plurality of server blades (*Fig. 3, items 300, 310-314*) coupled to said one or more shared devices via a service unit (*Fig. 3, items 302, 321-323*), wherein said service unit is configured to establish a connection between one of said one or more shared devices and one of said plurality of server blades requesting to access said one of said one or more shared devices (*device uses device manager and remote device driver*) (col. 7, lines 30-67 through col. 8, lines

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1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-33, etc.);

wherein said requesting server blade comprises:

a processor (*processor inside the computational service providers, Fig. 3, items 300, 310-314*); and

a memory unit coupled to said processor, wherein said memory unit is operable for storing a program, wherein the program is operable for performing the following programming steps (*memory and processor inside the computational service providers, Fig. 3, items 300, 310-314*):

receiving a request to access said requested shared device from said requesting server blade (*done by device manager and remote device driver*) (col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-33, etc.); and

issuing a query to said service unit as to whether said requested shared device is being accessed (*done by device manager and remote device driver*) (col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-33, etc.);

wherein if said requested shared device is not being accessed by said requesting server blade then the program is further operable for performing the following programming steps:

receiving a response to said query indicating that said requested shared device is not available (*done by device manager and remote device driver*) (*col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-33, etc.*); and

waiting to receive a response that said requested shared device is available (*done by device manager and remote device driver*) (*col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-33, etc.*).

14. In summary, Ruberg teaches accessing a remote device (*USB device, coupled flash memory, etc.*) over a network and can be applied in a virtual desktop system (*see Abstract, col. 2, lines 40-51, etc.*). The computational service providers (*Fig. 3, item 300*) are a group of computers (*server blades*) that are connected to human interface devices (*remote shared devices*) (*Fig. 3, item 302*). The device manager and *remote device driver* handle the communication between the server blade and the shared devices (*col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, etc.*). The shared device is checked for availability and a message is sent to indicate device status (*col. 10, lines 29-57, etc.*).

15. As to claim 16, Ruberg teaches wherein said service unit comprises:

a processor (*processor inside the computational service providers, Fig. 3, items 300, 310-314*); and

a memory unit coupled to said processor, wherein said memory unit is operable for storing a computer program, wherein the computer program is operable for performing the following programming step (*memory and processor inside the computational service providers, Fig. 3, items 300, 310-314*):

determining if said requested shared device is being accessed (*device manager and remote device driver works to give availability of devices*) (*see Abstract, col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, etc.*).

16. As to claim 17, Ruberg teaches wherein if said requested shared device is not being accessed then the computer program of said service unit is further operable for performing the following programming step:

connecting said requested shared device with said requesting server blade (*see Figs. 2 and 3, etc.*);

wherein if said requested shared device is not being accessed then the program of said requesting server blade is further operable for performing the following programming step:

transferring said request to access said requested shared device to said requested shared device (*device manager and remote device driver works to give availability of*

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devices) (see Abstract, col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-56, etc.).

17. As to claims 18-19 they are rejected for the same reasons as stated in the rejections of claims 4-5.

18. As to claim 20, Ruberg teaches wherein the program of said requesting server blade is further operable for performing the following programming step:

receiving said response that said requested shared devices is available (*notifying of the availability of devices) (see Abstract, etc.).*

19. As to claim 21, Ruberg teaches wherein the computer program of said service unit is further operable for performing the following programming step:

connecting said requested shared device with said requesting server blade (*done by device manager and remote device driver) (col. 7, lines 30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-33, etc.);*

wherein the program of said requesting server blade is further operable for performing the following programming step: transferring said request to access said requested shared device to said requested shard device (*done by device manager and remote device driver) (col. 7, lines*

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30-67 through col. 8, lines 1-28, Fig. 2, col. 2, lines 40-41, col. 5, lines 1-37, col. 6, lines 8-34 and lines 59-60, col. 10, lines 28-33, etc.).

20. As to claim 22 it is rejected for the same reasons as stated in the rejections of claim 7.

Response to Arguments

21. Applicant's arguments have been fully considered but they are now moot in view of the new grounds of rejections.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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